second cause of fever in rural areas after malaria. In many other countries such studies have not yet been conducted. The identification of R. felis in mosquitoes questions their role in this disease. In practice, because of their difficulty of diagnosis, rickettsioses were considered, during the greater part of the 20th century, as rare diseases. In reality, they are among the most commons in travellers as a cause of fever, as well as in people, worldwide, in contact with biting arthropods. Finally the current pitfall in this field is the misuse of nested PCR that generate many false positive diagnosis and should be avoided.

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Room: Room 2.40

Role of delocalized point of care diagnosis of Rickettsioses in Senegal (Africa)

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A growing range of rapid diagnostic tests can be performed at the Point-of-Care laboratory (POC) to elucidate the etiology of febrile conditions. In tropical Africa, the spectrum of the bacterial pathogens causing fever is poorly understood and molecular-based diagnostic laboratories are rare, the time lag between test results and patient care is a critical point for treatment of disease. This study provides the activity report of a POC in a rural Senegal village, the information for its implementation in field conditions and describes the methodology used to organize the running of this new biomedical technology in response to the needs of rural African healthcare. Based on accumulated knowledge of the repertoire of microbial causes of febrile diseases in rural Senegal, we implemented the rural POC in Dielmo (Senegal) to decrease the time lag between test results and patient care. From February 2011 to May 2012, 563 blood specimens from febrile patients were collected in Dielmo and Ndiop villages. All samples were screened for *Borrelia* spp., *Coxiella burnetii, Tropheryma whipplei, Rickettsia conorii, R. africae, R. felis*, and *Bartonella* spp. We identified DNA from at least one bacterial pathogen in 120/563 (21.3%) of the samples from febrile patients. *B. crocidurae* was identified in 59 cases (10.5%), and *R. felis* in 36 cases (6.4%), *Bartonella* spp. in 22/563 cases (4%), *C. burnetii* in 2 cases (0.3%) and *T. whipplei* in one patient (0.2%). *R. africae* and *R. conorii* were not detected. Among 8 co-infected patients, 5 were co-infected by *R. felis* and *B. crocidurae*, 2 by *B. crocidurae* and *Bartonella* spp., 1 by *B. crocidurae* and *C. burnetii* and 1 by *R. felis* and *B. quintana* in 1. We report the proof of concept of POC in rural tropical Africa. Diagnosing that 21.3% of acute infections can be successfully treated with doxycycline should change the treatment strategy for acute fevers in West Africa.

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Rickettsial disease in febrile patients in Africa with or without malaria

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Presenter did not provide an Abstract

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Can pediatric HIV be eliminated?

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The World Health Organization (WHO) has called for the "virtual elimination" of pediatric HIV. Virtual elimination, an ambitious program encompasses the goals of reducing the number of new child HIV infections by 90% by 2015 and to reduce perinatal transmission to rates of less than 5%. To achieve this will require: 1) efforts to decrease primary HIV infection in young women; 2) the prevention of unintended pregnancies in HIV infected women; 3) the reduction of perinatal transmission; 4) optimital care for families infected with HIV. This will require significant resources at a country level aimed at health systems strengthening, especially in countries with a high burden of HIV. Improving access to contraception and universal HIV testing for women of child bearing potential will be a critical component to achieving this. Ensuring that all pregnant women attend antenatal care, receiving regular HIV testing during pregnancy and timely triage into antiretroviral care without seepage will help to drive perinatal transmission down. Preventing post-natal transmission through breastfeeding and retention in care of both mother and infant are critical. This talk will look at the barriers and challenges to eliminating pediatric HIV as well as looking at strategies for potential pediatric cure.

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